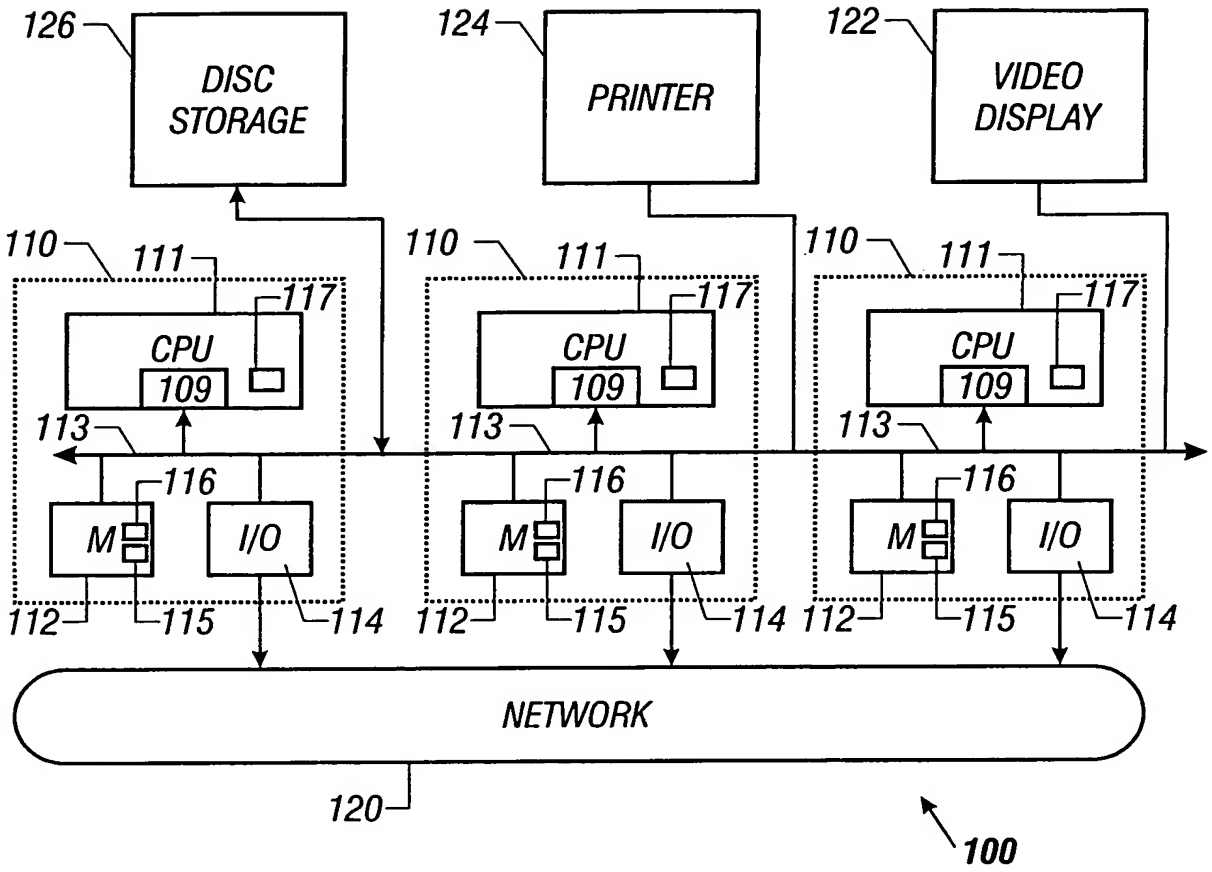
126
DISC STORAGE
124
PRINTER
122
VIDEO DISPLAY
110
111
117
CPU
109
113
116
M
I/O
112
115
114
NETWORK
120
100

FIG. 1

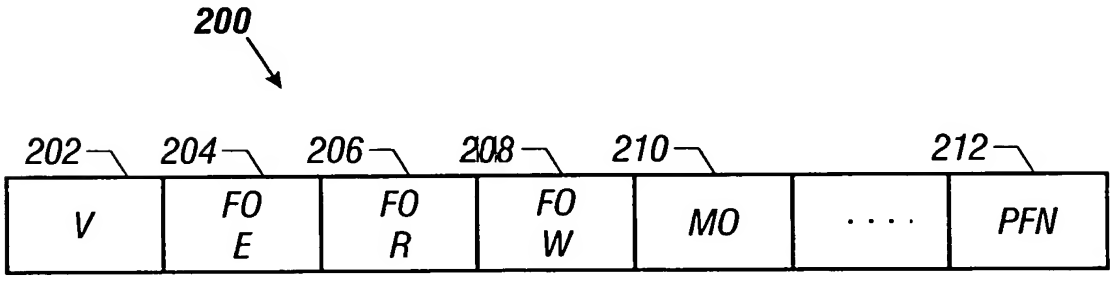
200
202
204
206
208
210
212
V
FO E
FO R
FO W
MO
. . . .
PFN

FIG. 2

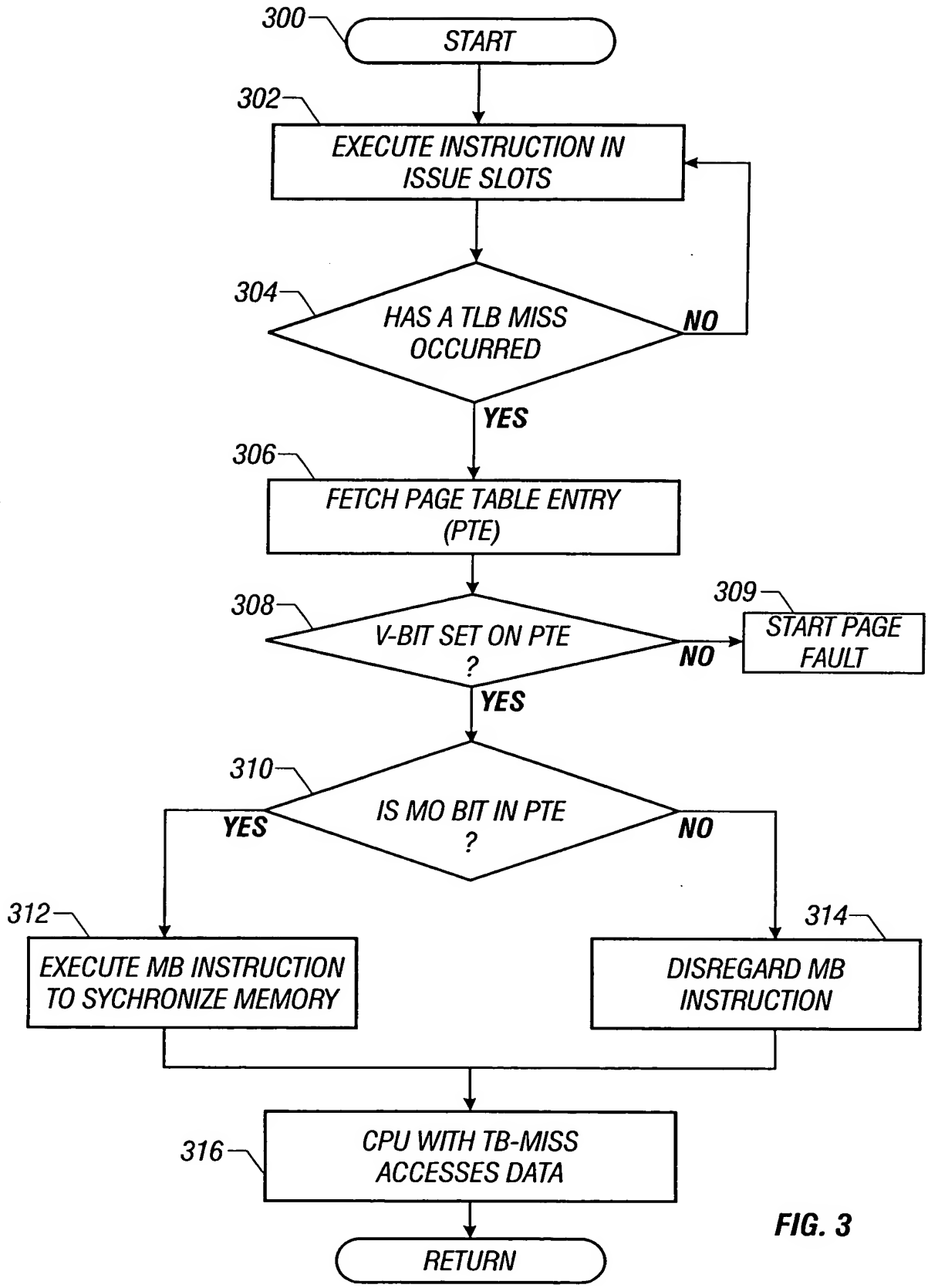
300
START
302
EXECUTE INSTRUCTION IN ISSUE SLOTS
304
HAS A TLB MISS OCCURRED
NO
YES
306
FETCH PAGE TABLE ENTRY (PTE)
308
V-BIT SET ON PTE ?
NO
309
START PAGE FAULT
YES
310
IS MO BIT IN PTE ?
YES
NO
312
EXECUTE MB INSTRUCTION TO SYCHRONIZE MEMORY
314
DISREGARD MB INSTRUCTION
316
CPU WITH TB-MISS ACCESSES DATA
RETURN

FIG. 3

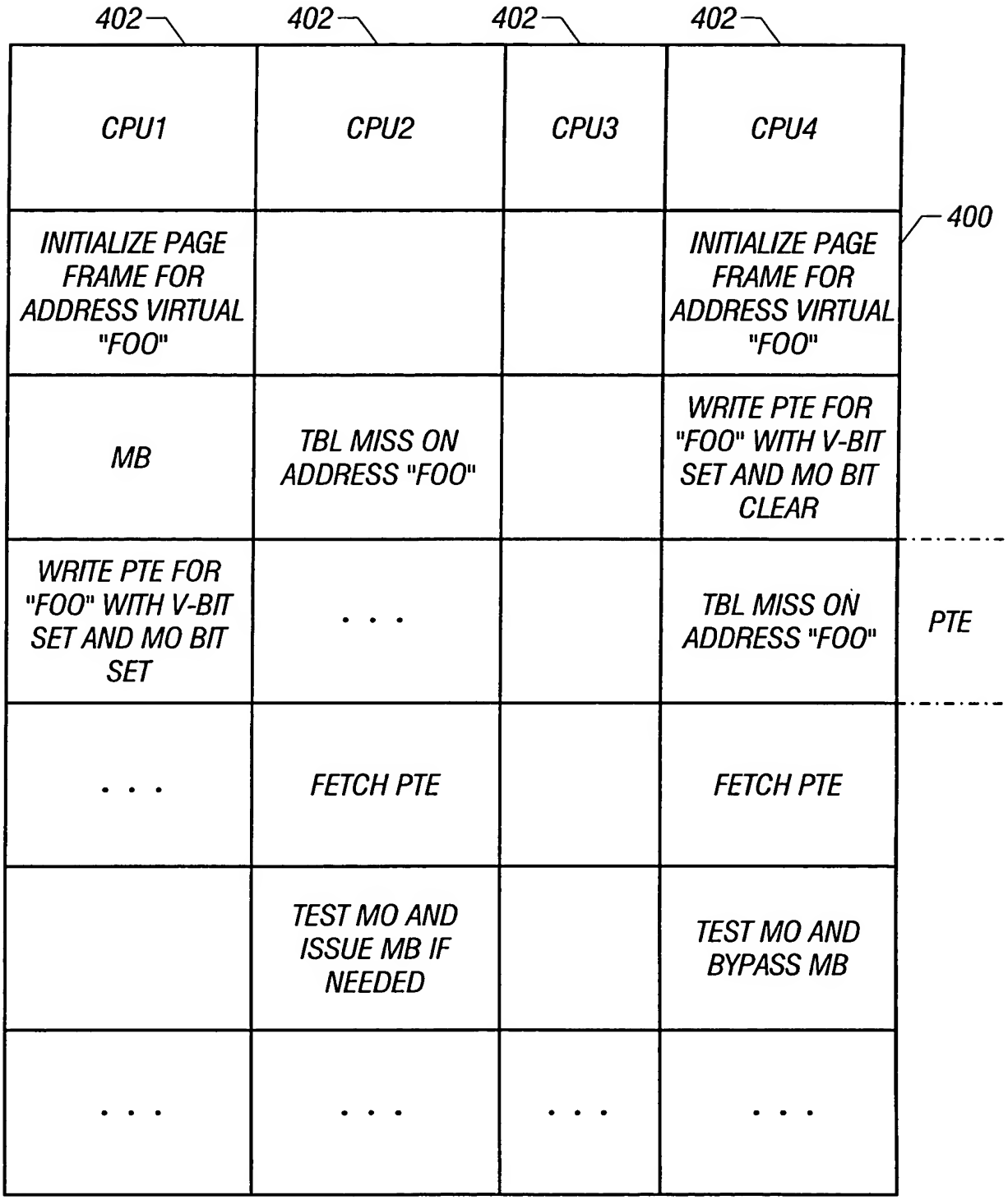
402
402
402
402
CPU1
CPU2
CPU3
CPU4
INITIALIZE PAGE FRAME FOR ADDRESS VIRTUAL "FOO"
INITIALIZE PAGE FRAME FOR ADDRESS VIRTUAL "FOO"
400
MB
TBL MISS ON ADDRESS "FOO"
WRITE PTE FOR "FOO" WITH V-BIT SET AND MO BIT CLEAR
WRITE PTE FOR "FOO" WITH V-BIT SET AND MO BIT SET
. . .
TBL MISS ON ADDRESS "FOO"
PTE
. . .
FETCH PTE
FETCH PTE
TEST MO AND ISSUE MB IF NEEDED
TEST MO AND BYPASS MB
. . .
. . .
. . .
. . .

FIG. 4